1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

252 [222] thickly under the trees. Gathered in piles, they were beaten until broken, winnowed in baskets, and the meats taken home. Several women together parched them by tumbling with coals; then they were finally ground on the metate and again winnowed in baskets. This occupied a morning. At noon the ground meal was taken to the river bank, where it was put in a big hole, prepared by firmly patting down the sand. One woman alone proceeded to [463] leach the bitter meal; one who was specially versed in the technique. She was called "a woman with dry hands" (ica'l,âsŭtk, "dry hands"). She alone fetched water to pour through the meal, repeating the soaking as it drained away. All afternoon was required for this task. So long as the nuts remained bitter, the water poured on them continued foamy. When the liquid was finally clear, all the women cut the meal cake with sharp sticks, lifted out their portions, carefully scraped the sand from the bottom, and carried them home in baskets. This was eaten dry.

The little sour beans of the cholla cactus (? âtŏ't; also the beans), ripening in March or early April (?), were pit roasted. These were placed on a flat rock in the mountains to be rolled about with a stick to remove the spines. The pit in which they were roasted was small (up to two feet in diameter, one foot deep), since the beans were only about the size of peanuts, and it was hard work to fill the hole. Flat stones were heated in the pit. Late in the evening the beans were put in the hole on a layer of branches of a certain green bush covering the hot stones. They were heaped higher than the surface of the ground, covered with another layer of the same bush, then more hot stones, and banked with a little dirt. A small fire was started over this to keep the stones hot. They were ready in the morning, when they were taken out to dry, while the women went off to gather more.

[222] Opuntia cactus fruit, which was rare in this locality, was gathered in September. It was eaten only fresh, and was said to [824] give the eater chills.[5] The prickly pear was rolled on the ground with a stick to remove the fine spines or brushed with a bit of sage bush. Tongs were unknown. It was split, peeled, and the 824 [231] [171] flesh eaten raw. (Sometimes the juice was squeezed on a white horse to make decorative spots.)

[5] Lloyd (p. 123) notes identical Pima opinion.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

All small game and
fish was cooked by men; women, however, cooked deer and 252
mountain sheep flesh. The reason is not apparent. [462]

Large mountain turtles (kapĕ′t), about a foot across, were [262]
eaten; also by Papago and Yavapai according to my informant. [171]
These were usually baked in ashes; sometimes boiled. The shells [237]
were not used for any purpose.

Honey was occasionally obtained from the flower stalks of 222
mescal, but these contain very little. This was the product of
large bees (mŭspo′kwĭni′l,ȧ, "black bee"). The classification of [825]
"bees" is rather interesting: working bees were called flies
(χălyȧsmo″kwĭlyȧvi′na); another bee with a yellow back (not a
hornet) was mŭspo′cĭlyȧmŏ′kkȧkwĭ′slc; a fourth variety, re-
sembling a wasp, was mŭspo′kwĭsĭ′c, "yellow bee." The nests of
working bees were found and the insects killed individually, but
their honey was not eaten.

A worm, called ȧmĕ′ (more probably a caterpillar, since it was
said to have a horn on each end) was caught, boiled, dried, and [252]
eaten.[17] They caught them in their hands in the spring and late
autumn. There was a peculiar way of catching them: with one
hand they caught the beast, broke off the end with the thumb
nail, squeezed it out, and inserted it between the other fingers of
the same hand. In some fashion they braided long strings of
these, perhaps because the "worm" coiled around its fellows.
Then they boiled and dried them. They were eaten dry or boiled.
Dried "worms" were also heated in warm water and fried. The [252]
finger tips got sore gathering them.

Pets (n,ȧχa′tk, "my dog," any pet) may be conveniently de- 231
scribed here. These were dogs and various birds. The chicken
hawk was perhaps the sole bird deliberately excluded, because [753]
one who handled it would "get sick in the lungs." Turkeys were
not pets.

Dogs (χatk) were said to be like present-day dogs; some black,
others spotted. They were called by whistling or by calling their
names. Several expressions were recorded: kaθi′k, kaθi′k, "come,
come," govŭna′l,ŭm, "get out, go away," sĭkiyĭ′mdĭk, "go

[17] Said to travel rapidly. These are undoubtedly the same as the Pima [825]
ma′kŭm (*ibid.*, p. 81).

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

231 away," and more emphatically gĕcpa'm, "go away!" Pups were
[224] trained for hunting, but since they were not used to hunt deer, this was most casual. Objects were thrown for them to fetch, so that they would catch rabbits and bring them on call. Horse meat was eaten but not dog, "because the dog is a person."[18]

552 Dogs were named for their appearance. A dog with a gray nose was called aucăki'n, "fire poker," because he resembled the burnt end of a poker. A dog with a white patch around his neck was xama'lgwexa'nŏk, "white collar"; a woolly little dog was mule'l, "bushy"; a black one with white spots over the eyes was hiθa'kgwĭcampŏ'p, "four eyes."

[439] Doves were kept as pets. They were brought by the Papago and were kept in long, cylindrical cages made of tules. The cage
[417] was about three feet long by one in diameter; the tules were mounted on a willow hoop at each end, with other tules woven through them at intervals along the side. This sort of cage was called ăkwi'k, "woven, twined." Mocking birds (kwĭcila') were also kept as pets, because they woke their owners in the morning and because they were dreamed of.

235 Young birds were caught and reared, so that each year their feathers might be plucked. These were mostly hawks; rarely buzzards and crows. A cage, about four feet high, was made of
[417] willow limbs thrust into the ground close together and bent over to be tied at the top. This lacked horizontal ribs. No nest was made inside, but simply a stick for a perch. Such a cage was gacωla'n,lva' tciwŭ'm, "built for [a particular species of large] hawks."

FISHING

236. Both Maricopa and Halchidhoma gave more attention to fishing than might have been expected. This is especially astonishing
[133] in the case of the Maricopa since their semi-desert habitat with its seasonably variable streams, containing at best little water, would seem most unprofitable for fishermen. There is no ques-
[262] tion, however, that even for them fish held second place beside jackrabbits in providing flesh. As between Halchidhoma and

[18] See p. 254.

1:Spier E-5 (1929-1932) 1933 NT15 River Yumans NT15
Maricopa

286 blankets, just large enough barely to cover a single person. Larger ones took too long to weave. A blanket of the usual size was three weeks in the making; preparing the cotton, spinning the
286 needed amount of yarn, and completing the weaving. Blankets
439 were traded to the Papago for horses. According to my information the Papago did not weave, but Curtis gives evidence that they did.[7] The rate of exchange in the middle of the last century was a single blanket for a poor horse, two for a good one.[8] This furnishes some index of their high value, for the Maricopa were so poor in horses, that they still thought nothing of going long distances afoot and considered even a relatively poor horse a worthwhile acquisition. The only horses they had were those
●[231] gotten by such trade. The Papago, on the other hand, were relatively rich in horses since they were situated much nearer the Mexican villages.

286 Weaving was properly man's work. There was, however, a di-
462 vision of labor such that preparing the cotton (ginning) was done by women alone, both sexes spun yarn, while weaving was solely in the hands of old men. When cloth and blankets became avail-
[177] able from traders, the old art waned and man's part in it lapsed entirely. Nowadays only women weave, making only cradle bands as part of their construction of cradles. Only commercial yarns are now used. Some knowledge still persists among the older men, however: Kutox, who had never woven, demonstrated with a spindle, exhibiting the typical draft motion and smoothing the yarn like an accomplished spinner. Both women
114 and men formerly wove bands, according to Hrdlička's informa-
286 tion of 1902 and 1905.[9] While the objects he discussed in his brief
462 account were cradle bands, it is conceivable that his informants were implying that women wove cradle bands while men made their own belts and headbands, if they were not in fact referring only to the period of transition. More serious is the implication of his statement that an old Maricopa made several blankets in

[7] Curtis, II, 6, 82, 111, 116.

[8] The same rate prevailed among the Pima (Russell, *Pima Indians*, p. 149).

[9] Hrdlička, *Maricopa Weaving*.

2:Bartlett G-5 (1850-1853) 1854
NT15 River Yumans NT15
Pima N429

air through the grain deposited in them. They are wattled with straw and rushes, and are sometimes coated with a thick layer of mud. As this becomes dry, additional layers of mud are added, which render

P RY 343

Coco-Maricopa Village.

P RY [361 231]

them impervious to water. The wheat and shelled corn (maize) are put into large vases or baskets, from three to five feet high, made out of ropes of wheaten straw. These ropes, which are as thick as one's arm, are coiled around into graceful forms, and sewed together like some kinds of basket work. The vases

P RY [415]

2:Bartlett G-5 (1850-1853) 1854
NT15 River Yumans NT15
Pima NV29

These people possess horses and cattle, though but very few mules. I found it impossible to procure a single mule from them during my stay. They breed none, and what they obtain are such as have been lost or abandoned by passing emigrants. They plough but little, finding their hoes quite sufficient for turning up the light soil. When ploughing is resorted to, oxen alone are used. They possess a few carts and wagons, obtained from emigrants, which they use with oxen for agricultural purposes. We saw all kinds of saddles among them, from the best dragoon and Mexican saddles to the simple tree or frame. They find them on the road, where they have been thrown away by parties who have lost their animals. Those who ride bareback use a broad girth, which is passed quite loosely around the body of the horse. Into this one foot is inserted. There seemed to be numbers of horses among them, which with the cattle are left to graze near the villages during the day, and at night are brought into the corrals, or yards, for safety.

The only weapon used by these tribes is the bow and arrow. The short club of the Yumas and the long lance of the Apaches I never saw among them. The constant use of this weapon has rendered them excellent marksmen. Even the boys are very expert in the use of it. I have seen boys of ten or twelve years of age, strike a cent three times out of five at a distance of fifteen yards. It is quite common for them to shoot doves with their arrows, and to bring in half a dozen of these birds after a ramble among the cotton-woods. It is a favorite amusement with both men and boys to try their skill at hitting the petahaya, which presents a fine object on the plain. Numbers

P: 133

The Gila river has a rapid current, with a fall of from 7 to 25 feet per mile, but in many localities the banks are 20 feet in height, necessitating the erection of large stone dams in order to carry the water high enough to reach some of the best land.

P: R 162

PIMAS ON RESERVATIONS AND MARICOPAS ON SALT RIVER RESERVATION.

DETAILS.	Pimas.	Maricopas.
Living on Gila River reservation	3,620	.....
Living on Salt River reservation	861	385
Total	4,481	385
Children under 1 year of age	220	22
Children of school age	1,062	60
Married persons in tribe	1,250	160
Wearing citizens' dress wholly	2,324	210
Wearing citizens' dress in part	1,060	200
Over 20 years of age who can read	40	.....
Under 20 years of age who can read	12	1
Under 20 years of age who can write English	12	1
Can use English enough for ordinary conversation	150	3
Received medical treatment during year	600	5
Mixed blood	10	.....
Dwellings owned by Indians	1,000	77
Missionaries on reservation	1	.....
Indians (criminals) punished during the year	21	.....
By court of Indian offenses	20	.....
By other methods	1	.....

P: R 231 241 433 434 492

PRODUCTS RAISED AND STOCK OWNED BY PIMA AND MARICOPA INDIANS IN THE YEAR 1889-1890.

PRODUCTS, ETC.	Number.	Value.
Total value of products raised	.....	$97,100
Bushels of wheat	20,000	12,000
Bushels of oats and barley	25,000	12,500
Bushels of corn	1,000	500
Bushels of vegetables	1,100	2,000
Melons	25,000	1,250
Pumpkins	12,000	1,100
Tons of hay cut	250	1,750
Total value of domestic animals	.....	27,400
Horses and mules owned by Indians	1,700	20,500
Cattle owned by Indians	1,000	17,000
Domestic fowls owned by Indians	5,000	750
Swine owned by Indians	50	250
Permanent wright tents owned by Indians with their own means	60,000	.....
Amount earned by freighting	.....	140
Value of products of Indian labor sold	.....	30,000

P: R 137 313

TIMBER SUPPLY ON THE GILA AND SALT RIVER RESERVATIONS.—The principal timber is the mesquite, a low, scrubby tree, more or less scattered over both reservations, but growing more plentifully in the vicinity of the rivers. The wood, when dried, furnishes nearly all the fuel used by the officials and Indians.

Cottonwood grows along the rivers and irrigating ditches, and though of inferior value for fuel, yet, on account of its rapid growth and its value as a shade for irrigating ditches, protecting the water from the direct rays of the sun and thus preventing too rapid evaporation, it is an important factor in the timber supply.

Willows are plentiful near the water courses, and are utilized by the Indians in covering their huts and in fencing for corrals. The cat's claw, a thorny shrub, is extensively used by the Indians in building their rude brush fences, and it thus serves an admirable purpose.

P: R 135

MINERAL RESOURCES.—Though the mining industry is carried on to quite an extent in various parts of the territory, producing quantities of gold, silver, and copper, it is not positively known that any deposits of